

Atty Dkt. No.: 10971150-2
USSN: 10/080,641

AMENDMENTS

In the claims:

1-31. (Canceled)

32. (Currently Amended) An apparatus for interrogating an addressable array of multiple features of different biopolymeric moieties, comprising:

(a) an adjustable detection angle detector system comprising more than one detector each of which is aligned with an emission filter that filters out light of an interrogating wavelength such that each detector of the detection system detects light of different wavelengths at respective different detection angles with an optical axis aligned at each detection angle; and

(b) a processor **which programmed to** receives signals from the detector system and correlates the received signals with respective biopolymeric features of the array.

33. (Original) An apparatus according to claim 32 additionally comprising a light source to provide an interrogating light in response to which the features emit the light of different wavelengths.

34-35. (Canceled)

36. (Original) An apparatus according to claim 32 additionally comprising a reader to read a code carried by an array unit, and a processor which causes the detector system to detect emitted light at a detection angle based on the read code.

37. (Original) An apparatus according to claim 33 wherein the light source produces a spot of light at the array, the apparatus additionally comprising a scanning system which scans the interrogating light spot across the array.

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38. **(Currently Amended)** An apparatus for interrogating an addressable array of multiple biopolymeric features of different moieties, comprising:

- (a) a seat which can retain an array unit carrying the array in a position for interrogation;
- (b) a detector system which can detect light at multiple different positions around a cone having an apex at a seated array, wherein said detector system includes an emission filter that filters out light of an interrogating wavelength; and
- (c) a processor ~~which~~ programmed to receives signals from the detector system and correlates the received signals with respective biopolymeric features of the array.

39-42. **(Canceled)**

43. **(Currently Amended)** An apparatus for interrogating an addressable array of multiple features of different biopolymeric moieties, comprising:

- (a) an adjustable detection angle detector system having a detector aligned with an emission filter that filters out light of an interrogating wavelength, wherein said detector can be moved to align with different detection angles so as to detect different emitted light wavelengths at respective different detection angles; and
- (b) a processor ~~which~~ programmed to receives signals from the detector system and correlates the received signals with respective biopolymeric features of the array.

44. **(Previously Presented)** An apparatus according to claim 43 additionally comprising a light source to provide an interrogating light in response to which the features emit the light of different wavelengths.

45. **(Previously Presented)** An apparatus according to claim 43 additionally comprising a reader to read a code carried by an array unit, and a processor which

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causes the detector system to detect emitted light at a detection angle based on the read code.

46. **(Previously Presented)** An apparatus according to claim 44 wherein the light source produces a spot of light at the array, the apparatus additionally comprising a scanning system which scans the interrogating light spot across the array.

47. **(Currently Amended)** An apparatus for interrogating an addressable array of multiple features of different biopolymeric moieties, comprising:

- (a) a detector system having a detector aligned with an emission filter that filters out light of an interrogating wavelength and an adjustable detection angle; and
- (b) a processor ~~which~~ programmed to receives signals from the detector system and ~~correlates~~ the received signals with respective biopolymeric features of the array.

48. **(Previously Presented)** An apparatus according to claim 47 additionally comprising a light source to provide an interrogating light in response to which the features emit light of different wavelengths.

49. **(Previously Presented)** An apparatus according to claim 47 wherein the detector system comprises at least one detector with an optical axis which can be moved to align with different detection angles.

50. **(Previously Presented)** An apparatus according to claim 49 wherein the detector system comprises multiple detectors positioned at corresponding multiple different detection angles.

51. **(Previously Presented)** An apparatus according to claim 49 additionally comprising a reader to read a code carried by an array unit, and a processor which

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causes the detector system to detect emitted light at a detection angle based on the read code.

52. (Currently Amended) An apparatus according to claim ~~49~~ 48 wherein the light source produces a spot of light at the array, the apparatus additionally comprising a scanning system which scans the interrogating light spot across the array.

53. (New) An apparatus according to claim 47, wherein said detector system is positioned to receive a constructively interfering emission from an array having a reflective coating.

54. (New) An apparatus according to claim 48, wherein said light source and said detector system are positioned to provide light and detect light from the same side of the array.

55. (New) An apparatus according to claim 32 wherein said apparatus further includes an addressable array of multiple features of different biopolymeric moieties and a reflective coating.

56. (New) An apparatus according to claim 38 wherein said apparatus further includes an addressable array of multiple features of different biopolymeric moieties and a reflective coating.

57. (New) An apparatus according to claim 43 wherein said apparatus further includes an addressable array of multiple features of different biopolymeric moieties and a reflective coating.

58. (New) An apparatus according to claim 47 wherein said apparatus further includes an addressable array of multiple features of different biopolymeric moieties and a reflective coating.